

OPIC
Office of Intellectual Property
Industrie Canada / Industry Canada

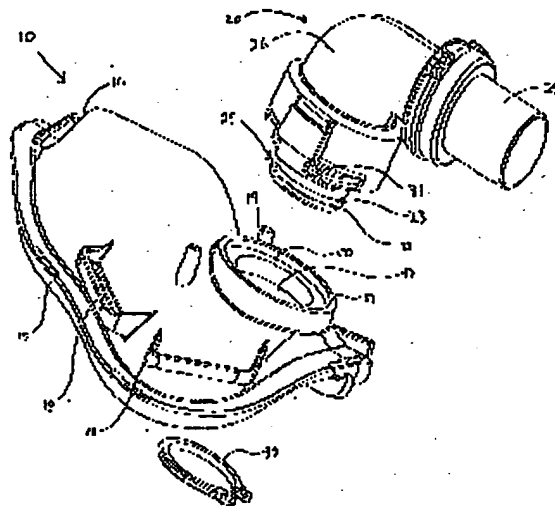


CIPO
Canadian Intellectual Property Office

(12) (19) (CA) Demande-Application

(21) (A) 2,298,129
(22) 2000/02/08
(43) 2001/08/09

(72) GUNARATNAM, MICHAEL KASSIPILLAI, AU
(72) KWOK, PHILIP RODNEY, AU
(72) LITIKOW, PERRY DAVID, AU
(71) RESMED LTD., AU
(51) Int. Cl. A61M 16/06
(30) 1999/02/09 (PP 8550) AU
(54) DISPOSITIF DE RACCORDEMENT POUR
L'APPROVISIONNEMENT EN GAZ
(54) GAS DELIVERY CONNECTION ASSEMBLY



(57) Patient gas delivery apparatus includes a gas flow generation, a gas delivery conduit and a patient mask (10). Connected in series between the conduit and the mask is an assembly (20) formed in at least two interengaging parts (26, 28), which may form a housing for an anti-asphyxia valve or flow sensor. The assembly further includes a sealing portion (22) for connection to the mask, the arrangement being such that connection of the assembly (20) to the mask (10) prevents disengagement of the interengaging connection (42, 44) between the two parts of the assembly.



Industrie Canada / Industry Canada

REST AVAILABLE COPY

CA 02298129 2000-02-08

7

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. Patient gas delivery apparatus including a mask adapted for communication
5 with a patient's airways, a gas flow generator and gas delivery conduit means, further
including an assembly connected in series between the conduit means and the mask,
said assembly being formed in at least two parts connected by interengaging
connecting means, said assembly further including means for connection to the mask,
wherein connection of the assembly to the mask prevents disengagement of the
10 interengaging connecting means such that said at least two parts of the assembly
cannot separate whilst the assembly is connected to the mask.
2. Patient gas delivery apparatus according to claim 1 wherein said interengaging
connecting means includes detent means on a first of said parts of the assembly, said
15 detent means releasably engaging a second of said parts of the assembly and being
held in engaged position by the mask whilst the assembly is connected to the mask.
3. Patient gas delivery apparatus according to claim 2 wherein said first and
second parts form a housing for a flow sensor of said apparatus.
20
4. Patient gas delivery apparatus according to claim 2 wherein said first and
second parts form a housing for an anti-asphyxia valve member.
5. Patient gas delivery apparatus according to claim 4 wherein said housing has at
25 least one vent which is closed by said valve member during normal operation of said
apparatus, opening when pressure falls below a predetermined pressure.
6. Patient gas delivery apparatus according to claim 2 wherein said second part
includes said means for connection of the assembly to the mask.
30
7. Patient gas delivery apparatus according to claim 6 wherein said means for
connection to the mask includes a mating portion for insertion into an aperture of the

BEST AVAILABLE COPY

CA 02298129, 2000-01-08

8

mask and locking means attachable to said mating portion from an inner side of the mask so as to prevent withdrawal of the mating portion from said aperture, said detent means being prevented from disengagement from said second part whilst said mating portion is inserted in said aperture.

5

8. Patient gas delivery apparatus according to claim 7 wherein said detent means is prevented from said disengagement by contact with the mask.

10

9. Patient gas delivery apparatus according to claim 8 wherein the detent means is resiliently biased in a radial direction relative to a common axis of said aperture and said mating portion such that the detent means engages behind a respective formation on said second part and wherein opposite radial movement of said detent means to disengage from said second part is prevented by said contact.

15

10. Patient gas delivery apparatus according to claim 9 wherein said disengagement is prevented by a projection on the mask.

11. Patient gas delivery apparatus according to claim 10 wherein said projection includes a projecting rim surrounding said aperture.

20

12. Patient gas delivery apparatus according to claim 1 wherein said means for connection of the assembly to the mask includes locking means located on an inner side of said mask, such that substantial removal of the mask from the patient is a prerequisite for disconnection of the assembly from the mask and disengagement of said interengagement means.

25

13. Patient gas delivery apparatus according to claim 1 wherein a distal end of the assembly includes rotatable coupling means for connection of the conduit.

30

14. Patient gas delivery apparatus according to claim 13 wherein the mask and the conduit are not adapted for direct interconnection without the assembly.

BEST AVAILABLE COPY

CA 02298129 2000-01-08

9

BEST AVAILABLE COPY

15. An assembly for connection in series between a gas delivery conduit means and a patient mask in a patient gas delivery apparatus, the assembly being formed in at least two parts connected by interengaging connecting means, said assembly further including means for connection to the mask, wherein connection of the assembly to the mask prevents disengagement of the interengaging connecting means such that said at least two parts of the assembly cannot separate whilst the assembly is connected to the mask.
16. An assembly according to claim 15, further including an anti-asphyxia valve member housed in said assembly.
17. An assembly according to claim 16 wherein said assembly has at least one vent, said valve member being adapted to close said vent during normal operation of the apparatus and to open when pressure falls below a predetermined pressure.



Industry
Canada

Industrie
Canada

Canada

Français
Home

Contact Us
Site Map

Help
What's New

Search
About Us

Canada Site
Registration

Strategis Index:

A B C D E F G H I J K L M N O P Q R S T U V W X Y
Z

strategis.gc.ca

CIPO  OPIC



Canadian Patents Database

03/15/2002 - 07:40:23

(12) Patent Application:

(11) CA 2298129

(54) GAS DELIVERY CONNECTION ASSEMBLY

(54) DISPOSITIF DE RACCORDEMENT POUR L'APPROVISIONNEMENT EN GAZ

[View or Download Images](#)

(72) Inventors (Country): KWOK, PHILIP RODNEY (Australia)
GUNARATNAM, MICHAEL
KASSIPILLAI (Australia)
LITHGOW, PERRY DAVID (Australia)

(73) Owners (Country): RESMED LTD. (Australia)

(71) Applicants (Country): RESMED LTD. (Australia)

(74) Agent: SWABEY OGILVY RENAULT

(45) Issued on:

(22) Filed on: Feb. 8 , 2000

(43) Laid open on: Aug. 9 , 2000

Examination requested: June 9 , 2000

(51) International Class (IPC): A61M 16/06

Patent Cooperation Treaty (PCT): No

(30) Application priority data:

Application No.	Country	Date
PP 8550	Australia	Feb. 9 , 1999

Availability of licence: N/A

Language of filing: English

ABSTRACT:

Patient gas delivery apparatus includes a gas flow generator, a gas delivery conduit and a patient mask (10). Connected in series between the conduit and the mask is an assembly (20) formed in at least two interengaging parts (26,28), which may form a housing for an anti-asphyxia valve or flow sensor. The assembly further includes a mating portion (22) for connection to the mask. the arrangement being such that connection of the assembly (20) to the mask (10) prevents disengagement of the interengaging connection (42,44) between the two parts of the assembly.

CLAIMS: [Show all claims](#)

*** Note: Data on abstracts and claims is shown in the official language in which it was submitted.

View or Download Images :

- ☐ Cover Page Image
- ☐ Abstract Image
- ☒ Claims Image
- ☐ Disclosures Image
- ☐ Drawings Image

[View the Image](#)

[Download in Adobe PDF](#)

[Top of Page](#)

Last Modified: 2001/06/13

[Important notices and disclaimers](#)
[Privacy Statement](#)